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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,474	09/30/2003	Gerald M. Knoblach	446132000400	1532
7590		05/17/2007		
Raj S. Dave Morrison & Foerster LLP Suite 300 1650 Tysons Boulevard McLean, VA 22102			EXAMINER TRAN, DALENA	
			ART UNIT 3661	PAPER NUMBER
			MAIL DATE 05/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10673474	9/30/03	KNOBLACH ET AL.	446132000400

Raj S. Dave  
Morrison & Foerster LLP  
Suite 300  
1650 Tysons Boulevard  
McLean, VA 22102

**EXAMINER**

Dalena Tran

**ART UNIT****PAPER**

3661

20070510

**DATE MAILED:**

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/673,474	KNOBLACH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dalena Tran	3661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 34-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/1/06</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Notice to Applicant(s)**

1. This office action is responsive to the amendment filed on 2/20/07. As per request, claims 1-3, 5-8, and 10 have been amended. Claims 34-37 have been added. Thus, claims 1-10, and 34-37 are pending.

The prior art submitted on 11/1/06 has been considered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, and 34-37, are rejected under 35 U.S.C.103(a) as being unpatentable over Campbell (5645248) in view of Campbell (6167263).

As per claim 1, Campbell ('248) discloses a control system to control a rise rate or a descent rate of a free-floating lighter than air platform comprising a vent actuator (see at least column 5, lines 5-35; and column 9, lines 11-25), an altitude sensor (see at least columns 6-7, lines 20-15; and column 8, lines 41-59), a processor located on the free-floating platform (see at least columns 5-6, lines 57-18), a device that controls the vent actuator (see at least column 7, lines 16-39; and column 9, lines 11-25), and, wherein the processor comprises stored, programmed or calculated criteria for command and control of the flight of the free-floating lighter than air platform (see at least columns 7-8, lines 40-59). Campbell ('248) does not explicitly disclose a termination controller. However, Campbell ('263) disclose a lighter than air

Art Unit: 3661

vehicle comprising an envelope filled with a lighter than air gas (column 5, line 64-67), a tether winged unmanned aviation vehicle (UAV) (columns 5-6, lines 67-1), a tether release mechanism implementable which permits the envelope to be disengaged from UAV (column 6, lines 21-23), thus, in the event of a failure, UAV can jettison tether and envelope and autonomously return to earth (column 6, lines 25-28). It would have been obvious to one of ordinary skill in the art that Campbell ('263) implicitly disclose a termination controller adapted to terminate a flight of the free-floating lighter than air platform, because ('263) discloses tether release mechanism implementable which permits the envelope to be disengaged from UAV. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Campbell ('248) by combining a termination controller to terminate the flight of the free floating platform in case of failure or out of range of preferring operating altitude to ensure safety.

As per claims 2-3, Campbell ('248) discloses the altitude sensor determines both an altitude of the free-floating platform and the rise rate or the descent rate, and the device determines the rise rate or the descent rate (see at least columns 8-9, lines 41-25).

As per claim 4, Campbell ('248) discloses the device is located on the free-floating platform (see at least column 7, lines 16-45).

As per claim 5, Campbell ('248) discloses a ballast container, a ballast and a ballast discharge actuator that controls a discharge of the ballast from the ballast container (see columns 2-3, lines 56-3; columns 6-7, lines 20-15; and columns 8-9, lines 42-61).

Claims 6-7 are method claims corresponding to system claim 1 above. Therefore, they are rejected for the same rationales set forth as above.

Art Unit: 3661

Claims 8, 9, and 10, are method claims corresponding to system claims 2, 4, and 5 above. Therefore, they are rejected for the same rationales set forth as above.

As per claims 34-35, Campbell ('248) discloses the ballast comprises a byproduct of a reactant used for generating a gas that is vented into the free-floating lighter than air platform using the vent actuator (see column 5, lines 5-36).

As per claims 36-37, Campbell ('248) discloses the processor is coupled to the altitude sensor (see at least column 8, lines 41-59).

#### **Remarks**

4. Applicant's argument filed on 2/20/07 have been fully considered. Upon updated search, the new ground of rejection as above as the result of the new amended claims.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shorten statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTHS** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

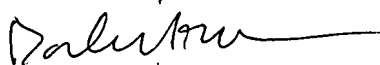
Art Unit: 3661

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner  
Dalena Tran



May 10, 2007